

REMARKS

This Application has been carefully reviewed in light of the Office Action dated February 3, 2011 (“*Office Action*”). In the Office Action, Claims 1-3, 5-7, 10, and 12-20 are pending and rejected. Applicants have amended Claims 1 and 5. Applicants submit that no new matter is added by these amendments. Applicants respectfully request reconsideration and favorable action in this case.

Section 112 Rejections

The *Office Action* rejects Claims 1-3, 5-7, 10, and 12-20 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Specifically, the *Office Action* states that “Claims 1 and 5 both include the limitation of using a processor to remove the repeating attribute from the at least one directory parent object such that the at least one directory parent object comprises only unique attributes” and alleges that “this limitation is not described in the specification and therefore fails to comply with the written description requirement.” (*Office Action*, pages 2 and 3). Additionally, the *Office Action* , states that the Specification also fails to describe “using a processor to create a first directory child object for storing a first value associated with the repeating attribute,” as formerly recited in Claims 1 and 5. (*Office Action*, page 3). While Applicants respectfully disagree with a rejection of the claims on this basis, Applicants have amended Claims 1 and 5 to address the issues identified by the Examiner.

Applicants note that “[t]o satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention.” See, e.g., *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1319, 66 USPQ2d 1429, 1438 (Fed. Cir. 2003); *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d at 1563, 19 USPQ2d at 1116. All that is required is that the written description clearly convey the information that an applicant has invented the subject matter which is claimed. There is no *in haec verba* requirement; rather, newly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure. M.P.E.P. 2163. In other words, there is no requirement that the claims use the exact terms as the Specification.

Although it is Applicants’ position that the Specification provides sufficient information and detail to clearly convey to those skilled in the art that Applicants had

possession of the claimed invention formerly recited in Claims 1 and 5, Applicants have amended Claims 1 and 5 to advance this case to allowance. For example, Claim 1 has been amended to recite *inter alia*:

. . . providing a database for storing a UDDI sub-structure comprising a plurality of UDDI objects having a plurality of attributes, wherein the plurality of attributes comprise:
 at least one unique attribute that occurs only once; and
 a repeating attribute that occurs more than once;
mapping the plurality of UDDI objects to a plurality of X.500 Directory objects, wherein the mapping comprises:
 using a computer system to move the at least one unique attribute into at least one directory parent object within a first object class such that the at least one directory parent object comprises only unique attributes;
 using the computer system in communication with the database to make a first directory child object for storing a value associated with the repeating attribute, the first directory child object also within the first object class . . .

Claim 5 has been similarly amended. Applicants respectfully note that Applicants' Specification describes a technique of "splitting" wherein, in one example, "a sub-structure contains an unrepeated element and a repeated element." (*Specification*, ¶ 138). Applicants' Specification further states that "[t]he unrepeated element (Overview URL) can be moved into the parent, while the repeated element can be made a child object." (*Specification*, ¶ 138). For further exemplary support of the amended claim language, Applicants' direct the Examiner to at least paragraphs 146, 221, and 231 of Applicants' Specification. Furthermore, Applicants' Specification is replete with discussion relating to the electronic nature of the claimed invention. For example, Figure 18 is described as a "block diagram of a computer system capable of implementing various aspects of the present disclosure." (*Specification*, ¶ 54 and 56-57). Applicants' Specification clearly provides express, implicit, or inherent disclosure of the above-identified claim elements of Claim 1 (and similar claim elements recited in Claim 5). Certainly, Applicants' Specification describes in sufficient detail either implicitly or inherently the claim elements in such a manner that one skilled in the art would reasonably conclude that Applicants had possession of the claimed invention.

For at least these reasons, Applicants respectfully request that the rejection of Claims 1-3, 5-7, 10, and 12-20 under 35 U.S.C. § 112, first paragraph be withdrawn.

Section 103 Rejections

The Office Action rejects Claims 1-3, 5-7, 10, and 12-20 under 35 U.S.C. §103(a) as being unpatentable over Applicants Admitted Prior Art ("*AAPA*"), and further in view of U.S. Patent Publication No. 2002/0169788 issued to Lee ("*Lee*"). Applicants respectfully request reconsideration for the following reasons.

Independent Claim 1 of the present Application, as amended, recites:

A computer-implemented method for use in a Web Services system having complex UDDI object(s), the method comprising:
 providing a database for storing a UDDI sub-structure comprising a plurality of UDDI objects having a plurality of attributes, wherein the plurality of attributes comprise:
 at least one unique attribute that occurs only once; and
 a repeating attribute that occurs more than once;
 mapping the plurality of UDDI objects to a plurality of X.500 Directory objects, wherein the mapping comprises:
 using a computer system to move the at least one unique attribute into at least one directory parent object within a first object class such that the at least one directory parent object comprises only unique attributes;
 using the computer system in communication with the database to make a first directory child object for storing a value associated with the repeating attribute, the first directory child object also within the first object class; and
 storing, in a X.500 Directory store, the value associated with the repeating attribute of the UDDI substructure in the first directory child object.

Neither reference nor their proposed combination disclose, either expressly or inherently, each and every element of the claims.

For example, the proposed *AAPA-Lee* combination does not disclose, teach, or suggest "mapping the plurality of UDDI objects to a plurality of X.500 Directory objects" and "storing, in a X.500 Directory store, the value associated with the repeating attribute of the UDDI substructure in the first directory child object," as recited in Claim 1. The *Office Action* relies upon *AAPA* for disclosure of the formerly recited database but upon *Lee* for the disclosure of the directory parent object and the first directory child object. (*Office Action*, pages 4-6). Applicants respectfully, however, that the proposed combination does not disclose, teach, or suggest "mapping the plurality of UDDI objects to a plurality of X.500

Directory objects” and “storing, in a X.500 Directory store, the value associated with the repeating attribute of the UDDI substructure in the first directory child object,” as recited in Claim 1.

Rather, Applicants’ Specification states that UDDI standards “do not necessarily specify how the standards should be implemented, nor whether the implementations should include storage using a database, a Directory or any other medium.” (*Specification*, ¶ 8). However, Applicants’ Specification cites the web site hosted by the organization responsible for the UDDI standards as stating that “[t]hus, far all UDDI implementations have been built on relational databases.” (*Specification*, ¶ 9). Applicants’ Specification further states that “implementing the UDDI standards . . . on a Directory requires the solving of a number of problems.” (*Specification*, ¶ 11). For example, according to the Specification, the UDDI standards leave “unaddressed . . . How to represent complex UDDI objects in a relatively efficient way” where objects include compound repeating elements” and “How to provide for relatively rapid searching for a specific items contained in repeating elements.” (*Specification*, ¶ 15). Thus, Applicants’ Specification makes clear that UDDI standards are implemented on relational databases rather than a Directory due to problems with mapping repeating elements. As such, the Background portion of Applicants’ Specification (identified as “AAPA” in the *Office Action*) does not disclose, teach, or suggest “mapping the plurality of UDDI objects to a plurality of X.500 Directory objects” and “storing, in a X.500 Directory store, the value associated with the repeating attribute of the UDDI substructure in the first directory child object,” as recited in Claim 1.

Further, *Lee* also does not disclose the recited claim elements. In fact, *Lee* discloses a system and method “for generating (28) a schema (22) for a relational database corresponding to a document having a document-type definition (18) and data complying with the document-type definition.” (*Lee*, Abstract). Stated differently, *Lee* discloses “automatically loading an extensible markup language (XML) document, as validated by a document-type definition (DTD), into a relational database.” (*Lee*, ¶ 3). Thus, *Lee* relates to relational databases and not a Directory or a X.500 Directory. Thus, even to the extent that *Lee* discloses that an “item represents an object” and “can have multiple unique attributes,” *Lee* also discloses that the items represented as objects are found in an XML document. (*Lee*, ¶ 113-114). There is no disclosure that the items are found in a UDDI sub-structure. Additionally, even though *Lee* discloses that an item “has a multiple-value attribute A” and

creating an item E:A “for each A” (*Lee*, ¶ 198), there is no disclosure in *Lee* of “mapping the plurality of UDDI objects to a plurality of X.500 Directory objects” and “storing, in a X.500 Directory store, the value associated with the repeating attribute of the UDDI substructure in the first directory child object,” as recited in Claim 1.

For at least these reasons, Applicants respectfully request reconsideration and allowance of Claim 1, together with Claims 2-3 and 12-16 that depend on Claim 1. For analogous reasons, Applicants also respectfully request reconsideration and allowance of independent Claim 5, together with Claims 6-7, 10, and 17-20 that depend on Claim 5.

CONCLUSION

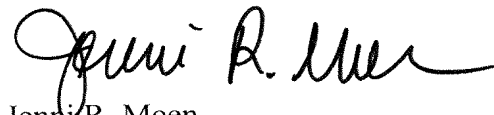
Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other apparent reasons, Applicants respectfully request full allowance of all pending Claims.

If the Examiner feels that a telephone conference or an interview would advance prosecution of this Application in any manner, the undersigned attorney for Applicants stands ready to conduct such a conference at the convenience of the Examiner.

Applicants believe no fee is due. However, should there be a fee discrepancy, the Commissioner is hereby authorized to charge any required fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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